

ABSTRACT OF THE DISCLOSURE

A method for contemporaneously utilizing seismic data in the pre-stack seismic domain and the post-stack seismic domain is disclosed. The method includes initiating a higher order probe at a three-dimensional coordinate in a post-stack seismic volume; and instantiating a pre-stack seismic data content for the higher order probe. In alternative aspects, the invention includes a program storage medium encoded with instructions that, when executed by a computer, perform the method and a computer programmed to perform the method.